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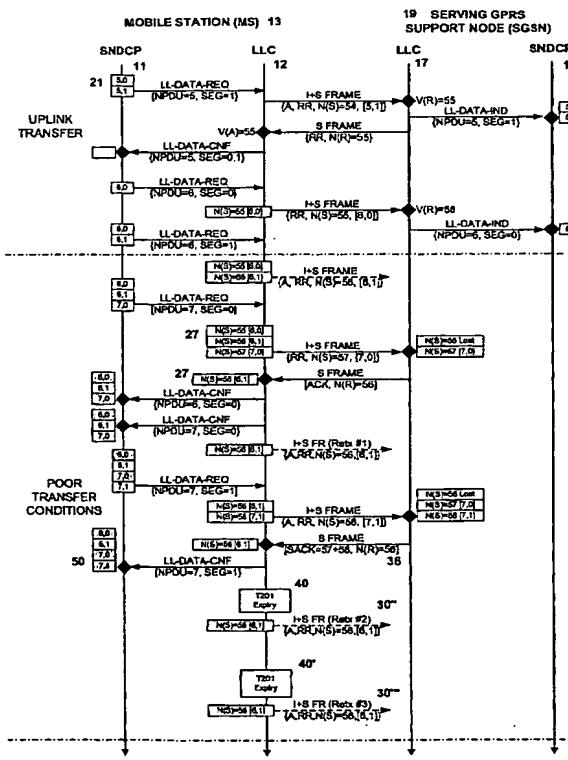
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(54) Title: **A DATA TRANSFER PROCEDURE FOR TRANSFERRING DATA OF A DATA SEQUENCE BETWEEN A TRANSMITTING ENTITY AND A RECEIVING ENTITY**



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(57) **Abstract:** A data transfer procedure enables data of a data sequence to be transferred between a transmitting entity (13) and a receiving entity (19). The entities each comprise a higher data handling layer (11, 17) and a lower data handling layer (12, 18). The procedure comprises transferring down from the higher data handling layer (11) of the transmitting entity (13) to the lower data handling layer (12) of the transmitting entity a data unit of the data sequence, which data unit comprises one or more segments. The or each segment is transmitted from the lower data handling level (12) of the transmitting entity (13) to the lower data handling level (17) of the receiving entity (19) via a transmission link between the transmitting entity (13) and the receiving entity (19). An acknowledgement of receipt of the or each segment is sent from the lower data handling level (17) of the receiving entity to the lower data handling level (12) of the transmitting entity. The or each segment is transferred from the lower data handling layer (17) of the receiving entity to the higher data handling layer (18) of the receiving entity in data sequence order. The higher data handling layer of the transmitting entity (13) is arranged to retain a copy of the data unit until such time as an at least implied acknowledgement of receipt of earlier segments in the sequence is sent back from the receiving entity (19) to the lower data handling level of the transmitting entity.